

REMARKS

Claims 1-3 and 56-80 are pending in this application, with claims 1, 56-59, 61, 65, 69, 73, and 77 being independent. Claims 56-59 have been previously withdrawn from consideration. Claims 1 and 69 have been amended to recite "wherein the organic compound film comprises: a first layer comprising a first compound; a second layer comprising the first compound and a second compound; and a third layer comprising the second compound, wherein the first compound is a blocking compound capable of stopping movement of holes or electrons, and wherein the second compound is at least one selected compound selected from the group consisting of . . .". Claims 1 and 69 have also been amended to no longer recite the feature "wherein the organic compound film comprises a region in which the blocking compound and the at least one selected compound are mixed." Claim 69 has also been further amended to recite "wherein a concentration change of the first and second compound in the second layer is continuous." Support for these amendments may be found in the application at least at pages 9 and 10 and at Fig. 2B. No new matter has been added.

Applicants acknowledge with appreciation the Examiner's allowance of claims 61-64 and 73-76.

As best understood by applicants, the Examiner has objected to claim 69 as including an unclear limitation. Specifically, the Examiner has asserted that the limitation "wherein a concentration change in the region is continuous" is unclear and, therefore, has given this limitation no patentable weight. Applicants have amended claim 69 for clarity to address the Examiner's concerns and assert that the limitation is clear and should be given patentable weight.

Independent claims 1, 65, 69 and 77, along with their dependent claims 2-3, 60, 66-68, 70-72 and 78-80, have been rejected as being anticipated by Kwong. As stated above, independent claims 1 and 69 have each been amended to recite an organic compound that includes three layers – a first layer that includes a first compound, a second layer that includes the first compound and a second compound, and a third layer that includes the second compound. Applicants request reconsideration and withdrawal of the rejection of claims 1 and 69, and their dependent claims, because Kwong does not describe or suggest the recited third layer that includes one of the two compounds included in the recited second layer.

Kwong describes an QLED structure with a phosphorescent-doped mixed layer architecture. The Examiner refers to Fig. 3 and its associated description in support of the contention that Kwong describes the structure recited in claims 1 and 69. The cited portions of Kwong disclose a first electron transporting layer 314 that includes an electron transporting material (e.g., Alq3), a second phosphorescent-doped mixed layer 313 that includes both an electron transporting material (e.g., Alq3) and a hole transport material (e.g., NPD) mixed with a phosphorescent (e.g., PtOEP), and a third hole injection layer 312 that includes a hole injection material (e.g. CuPc). See col. 8, lines 50-59. Notably, the third hole injection layer 312 does not include a compound that is also included in the second phosphorescent-doped mixed layer 313, and, therefore, the structure described by Kwong does not satisfy the recited limitation "a third layer including the second compound."

For at least this reason, applicants request reconsideration and withdrawal of the rejection of claims 1 and 69, and their dependent claims.

Each of independent claims 65 and 77 recites, among other features, "wherein the organic compound film comprises a region in which the electron transporting compound and the electron injecting compound are mixed" (emphasis added). The Examiner neglected to address this feature in his rejection of claims 65 and 77, and their dependent claims, over Kwong. Applicants submit that Kwong does not describe or suggest this feature. Rather, Kwong describes a mixed layer in which an electron transporting material, a hole transport material, and a phosphorescent are mixed. For at least this reason, applicants request reconsideration and withdrawal of the rejection of claims 65 and 77, and their dependent claims.

Applicants submit that all claims are in condition for allowance.

Applicants do not acquiesce in the Examiner's characterizations of the art. For brevity and to advance prosecution, however, applicants may have not addressed all characterizations of the art and reserve the right to do so in further prosecution of this or a subsequent application. The absence of an explicit response by the applicants to any of the Examiner's positions does not constitute a concession of the Examiner's positions. The fact that applicants' comments have focused on particular arguments does not constitute a concession that there are not other

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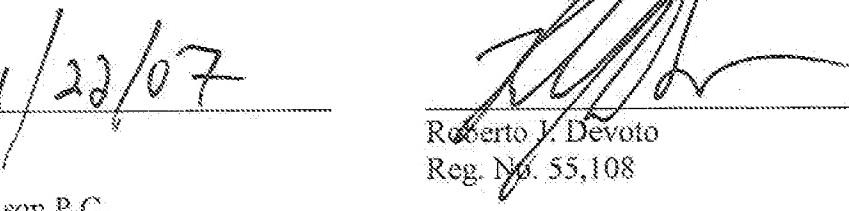
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arguments for patentability of the claims. All of the dependent claims are patentable for at least the reasons given with respect to the claims on which they depend.

The fee in the amount of \$120 for the Petition for Extension of Time fee is being filed concurrently herewith on the Electronic Filing System (EFS) by way of the deposit account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 1/28/07

  
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